OIPE IAP48 FEB 13 2006 PATENT & TRADEMARK OFFICE

Amendments to the Specification:

Please replace the paragraph beginning at page 5, line 19 with the following amended paragraph:

FIG. 1 illustrates an exemplary APS. A pixel array 102 has N rows of pixels with each row having M columns. A column-parallel signal chain **[[194]]** **104** such as a sampling capacitor bank with M storage cells is used for readout.

Please replace the paragraph beginning at page 6, line 13 with the following amended paragraph:

The inventors of the present invention recognized a limitation of the above two methods in that the exposure remains the same for the entire image. This can result in distortion of the detected images in some circumstances. For example, an outdoor scene might be optimally exposed for the sunlit areas but ~~over~~**under**exposed in the shadowed areas. This can result in loss of detail in shadowed areas.

Please replace the paragraph beginning at page 6, line 20 with the following amended paragraph:

One solution to the above problem is to use a nonlinear output sensor. Such a sensor is designed to have a high differential gain for **low** light levels, and low differential gain for high light levels. It is desirable that the nonlinear gain be achieved within each pixel. As a result, pixel to pixel variations in the transfer function can lead to unacceptable values of fixed pattern noise.